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ALJ	:	<u>Darling/Dudney</u>
Witness	:	<u>Renaghan</u>



**OFFICE OF RATEPAYER ADVOCATES  
CALIFORNIA PUBLIC UTILITIES COMMISSION**

**Report on the Results of Operations  
for  
Southern California Edison Company  
General Rate Case  
Test Year 2015**

**Cost Escalation**

San Francisco, California  
August 4, 2014

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## **COST ESCALATION**

### **I. INTRODUCTION**

3 This exhibit presents the analyses and recommendations of the Office of  
4 Ratepayer Advocates (ORA) regarding Southern California Edison Company's  
5 (SCE) forecasts of labor and non-labor and capital-related cost escalation for 2013,  
6 2014 and Test Year (TY) 2015. Escalation is the rate of inflation for the costs of the  
7 utility's purchase of labor, materials and capital-related items.

8 ORA's recommendations are summarized in Section II. Sections III, IV and V  
9 discuss ORA's and SCE's historical and forecast estimates of labor, non-labor and  
10 capital escalation rates, respectively.

### **II. SUMMARY OF RECOMMENDATIONS**

12 ORA and SCE developed labor and non-labor escalation rates for Steam  
13 Production, Nuclear Production, Hydro Production, Electric Transmission, Electric  
14 Distribution, Customer Accounts, Customer Service and Information, Sales and  
15 Administrative and General. The results are reported in Tables 4-1 and 4-2. Both  
16 ORA and SCE relied upon forecasts taken from the IHS Global Insight Power  
17 Planner. ORA's forecasts rely upon the Fourth Quarter 2013 IHS Global Insight  
18 Power Planner while SCE's forecasts are drawn from the Fourth Quarter 2012 IHS  
19 Global Insight Power Planner.

20 ORA has adopted SCE's labor, non-labor and capital-related escalation  
21 methodology. ORA's labor, non-labor and capital escalation rates differ from SCE's  
22 labor, non-labor and capital-related escalation rates because ORA based its forecast  
23 on a more recent Global Insight Power Planner forecast. ORA recommends the  
24 Commission adopt its labor, non-labor and capital escalation rates because ORA's  
25 estimates are based on more recent forecast information.

26 Finally, ORA recommends that the labor, non-labor, and capital escalation  
27 rates be updated in September in accordance with the Commission's adopted  
28 General Rate Case plan.

## ORA's Recommendations

- For 2013, 2014, and TY 2015 ORA forecasts labor escalation rates of 2.79%, 2.31 % and 2.59 %, respectively. SCE forecasts slightly higher escalation rates of 2.79 %, 2.36 % and 2.53 %. ORA's annual escalation rates translate to a compound growth rate of 7.89 % for TY 2015 while SCE annual rates translate to a compound growth rate of 7.88 % for TY 2015.
- For steam generation non-labor escalation ORA forecasts 0.98 % for 2013, 1.45 % for 2014 and 2.25 % for 2015. SCE forecasts non-labor escalation rates of 0.90 %, 1.74 % and 2.28 %, for 2013, 2014 and 2015, respectively. On a compound basis ORA recommends a 4.73 % escalation rate for this category while SCE recommends a 5.00 % escalation rate for TY 2015.
- For hydro generation ORA forecasts annual escalation rates of 0.22 %, 1.50 % and 1.02 % for 2013, 2014 and 2015, respectively. These annual rates result in a TY 2015 compound escalation rate of 3.78 %. SCE forecasts escalation rates of 0.15 % for 2013, 1.74 % for 2014 and 2.28 % for 2015. SCE recommends a compound escalation rate of 3.58 percent for TY 2015.
- For other generation, ORA recommends an annual escalation rate of 1.49 percent for 2013, 2.32 % for 2014 and 2.27 % for 2015. Compounding these annual rates results in a compound escalation rate of 6.20 percent for 2015. SCE recommends a compound escalation rate of 7.05 % for 2015. This compound rate is based on annual escalation rates of 1.72 %, 2.38 % and 2.79 % for 2013, 2014 and 2015.
- For electric distribution, ORA recommends an escalation rate of 1.24 % for 2013, 1.28 % for 2014 and 1.93 % for 2015. For TY 2015 ORA recommends a compound escalation rate of 4.51 %. SCE recommends annual escalation rates of 0.72 %, 1.53 % and 1.96 %, respectively for 2013, 2014 and 2015. On a compound basis SCE recommends a TY escalation rate of 4.26 %.

- For electric transmission ORA recommends, respectively, non-labor escalation rates of 1.24 %, 1.28 % and 1.93 percent for 2013, 2014 and 2015. The compound recommended rate for 2015 is 5.42 %. SCE recommends annual escalation rates of 1.51 %, 1.98 % and 2.41 %, respectively, for 2013, 2014 and 2015. These annual rates result in a compound rate of 6.02 %.
- For customer accounts ORA recommends escalation rates of 2.17 % in 2013, 1.56 % in 2014 and 1.72 % in 2015. These annual rates yield a compound rate of 5.55 % in TY 2015. SCE recommends non-labor escalation rates of 1.00 % in 2013, 1.56 % in 2014 and 1.49 % in 2015 for a compound rate of 4.11 % in 2015.
- For customer service and information ORA recommends annual escalation rates of 1.46 %, 1.20 % and 1.72 %, respectively, for 2013, 2014 and TY 2015. On a compound basis ORA recommends a compound escalation rate of 4.40 % in 2015. SCE recommends annual escalation rates of 0.82 % in 2013, 1.48 % in 2014 and 1.50 % in 2015. For TY 2015, SCE recommends a compound non-labor escalation rate of 3.84 %.
- For sales expense, ORA recommends, respectively, annual escalation rates of 1.90 %, 1.19 % and 2.18 % for 2013, 2014 and 2015. These annual rates yield a compound escalation rate of 5.35 % for 2015. SCE recommends annual escalation rates of 1.29 % in 2013, 2.01 % in 2014 and 1.87 % in 2015. These annual rates result in a compound escalation rate of 5.26 % in TY 2015.
- For administrative and general, ORA forecasts annual escalation rates of 2.26 % in 2013, 2.41 % in 2014 and 2.99 % in 2015. For TY 2015 ORA recommends a compound escalation rate of 7.87 %. SCE recommends a compound escalation rate of 8.13 percent in TY 2015. This compound rate is the product of annual escalation rates of 2.29 % in 2013, 2.72 % in 2014 and 2.91 % in 2015.

ORA and SCE also developed capital-related escalation rates for Steam Production, Nuclear Production, Hydro Production, Other Production, Electric Transmission, Electric Distribution, Installed Meters and General Plant. Unlike, Steam Production, Nuclear Production, Other Production, Transmission, Distribution, and Installed Meters, the Common Plant index is a company-specific index.<sup>1</sup> The results are reported in Tables 4-3 and 4-4. Both ORA and SCE relied upon forecasts taken from the IHS Global Insight Power Planner. ORA's forecasts rely upon the Fourth Quarter 2013 IHS Global Insight Power Planner while SCE's forecasts are drawn from the Fourth Quarter 2012 IHS Global Insight Power Planner.

- For Steam Production, ORA forecasts annual escalation rates of 4.49 % for 2013, 1.01 % for 2014 and 2.01 % for TY 2015. These annual estimates yield a compound escalation rate of 7.67 % for 2015. SCE recommends annual escalation rates of 1.24 %, 1.56 % and 2.58 % for 2013, 2104 and 2015, respectively. SCE recommends a compound escalation rate of 5.47 % for TY 2015.
- For Nuclear Generation capital ORA recommends, respectively, annual escalation rates of 5.34 %, 1.50 % and 2.13 % for 2013, 2014 and 2015. The recommended compound rate for 2015 is 9.20 %. SCE recommends annual escalation rates of 1.65 % for 2013, 2.16 % for 2014 and 2.73 % for 2015. Compounding SCE annual escalation rates yields a compound escalation rate of 6.69 % for TY 2015.
- For Hydro Generation ORA recommends annual escalation rates of 3.29 % for 2013, 2.13 % for 2014 and 2.15 % for TY 2015. The compound rate for TY 2015 is 7.76 %. SCE recommends, respectively, annual escalation rates of 2.07 %, 2.45 % and 2.78 % for 2013, 2014 and 2015. Taken together, this yields a recommended compound rate of 7.48 % for TY 2015.

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<sup>1</sup> The derivation of this index is discussed in greater detail in Section V of this report.

- 1       • For Other Production Plant capital escalation ORA recommends annual  
2       escalation rates of 3.31 %, 1.60 % and 2.21 % for 2013, 2014 and 2015.  
3       Over the 2013-2015 period this yields a compound escalation rate of 7.28  
4       % for 2015. SCE recommends an annual escalation rate of 3.25 % in  
5       2013, 2.21 % in 2014 and 2.39 % in 2015, for a compound escalation rate  
6       of 8.05 % in 2015.
- 7       • ORA recommends Transmission Plant escalation rates of 2.32 % in 2013,  
8       1.72 % in 2014 and 1.93 % in 2015. The compound escalation rate for TY  
9       2015 is 6.09 %. SCE recommends annual Transmission Plant escalation  
10      rates of 1.62 %, 2.24 % and 2.67 %, respectively, for 2013, 2104 and  
11      2015. These annual escalation rates yield a compound rate of 6.67 %.
- 12     • Turning to Distribution Plant, ORA recommends an annual escalation rate  
13     of 2.39 % for 2013, 1.53 for 2014 and 2.25 % for TY 2015. Taken together  
14     the annual rates yield a compound rate of 6.29 % for TY 2015. SCE  
15     recommends a compound Distribution Plant escalation rate of 6.99 % for  
16     TY 2015. This rate is based on annual escalation rates of 2.18 % in 2013,  
17     2.49 % in 2014 and 2.12 % in TY 2015.
- 18     • ORA's proposed annual escalation rates for the plant category Installed  
19     Meters are, respectively, 3.55 %, 5.05 % and 3.11 % for 2013, 2014 and  
20     2015. Compounding these annual rates yields a compound escalation rate  
21     of 12.17 % in TY 2015. SCE recommends annual escalation rates of 2.73  
22     % in 2013, 5.62 % in 2014 and 2.08 % in 2015, for a compound rate of  
23     10.76 % in TY 2015.
- 24     • In the case of General Plant, ORA recommends annual escalation rates of  
25     1.75 % in 2013, 2.62 % in 2014 and 2.19 % in 2015. Compounding these  
26     annual rates yields a compound TY escalation rate of 9.59 % in TY 2015.  
27     SCE, on the other hand, recommends an annual escalation rate of 1.87 %  
28     for 2013, 2.23 % for 2014 and 2.28 % for 2015. Taken together these  
29     annual escalation rates yield a compound rate of 6.59 % for TY 2015.

1 Table 4-1 compares ORA's and SCE's forecasts of labor and non-labor  
 2 escalation rates for 2013 through 2015:

3 **Table 4-1**  
 4 **Comparison of ORA's and SCE's Forecasts of**  
 5 **2013-2015 Labor and Non-Labor Annual Escalation Rates**

Description	ORA Recommended			SCE Proposed <sup>2</sup>		
	2013	2014	2015	2013	2014	2015
<b>Labor</b>	2.79 %	2.31 %	2.59 %	2.79 %	2.36 %	2.53 %
<b>Non-Labor</b>						
Fossil Generation	0.98 %	1.45 %	2.23 %	0.90 %	1.74 %	2.28 %
Hydro Generation	0.22 %	1.50 %	2.02 %	0.15 %	1.74 %	2.28 %
Nuclear Generation	0.85 %	1.57 %	2.26 %	1.06 %	1.90 %	2.22 %
Other Generation	1.49 %	2.32 %	2.27 %	1.72 %	2.38 %	2.79 %
Electric Distribution	1.24 %	1.28 %	1.93 %	0.72 %	1.53 %	1.96 %
Electric Transmission	1.37 %	1.91 %	2.05 %	1.51 %	1.98 %	2.41 %
Customer Accounts	2.17 %	1.56 %	1.72 %	1.00 %	1.56 %	1.49 %
Customer Service & Information	1.46 %	1.20 %	1.72 %	0.82 %	1.48 %	1.50 %
Sales	1.90 %	1.19 %	2.18 %	1.29 %	2.01 %	1.87 %
Administrative & General (excl. Health)	2.26 %	2.41 %	2.99 %	2.29 %	2.72 %	2.91 %

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<sup>2</sup> Ex. SCE-10, Results of Operations, Vol. 1, Ch. VII, p. 71.



Table 4-2 compares ORA's and SCE's forecasts of labor and non-labor compounded escalation factors for 2012 through 2014:

**Table 4-2**  
**Comparison of ORA's and SCE's Forecasts of**  
**2013-2015 Labor and Non-Labor Compounded Escalation Factors**  
**(2012 = 1.0000)**

Description	ORA Recommended			SCE Proposed <sup>3</sup>		
	2013	2014	2015	2013	2014	2015
Labor	1.0279	1.0516	1.0789	1.0279	1.0522	1.0788
Non-Labor						
Fossil Generation	1.0098	1.0245	1.0473	1.0090	1.0266	1.0500
Hydro Generation	1.0022	1.0172	1.0378	1.0015	1.0165	1.0358
Nuclear Generation	1.0085	1.0243	1.0474	1.0106	1.0298	1.0527
Other Generation	1.0149	1.0384	1.0620	1.0172	1.0414	1.0705
Electric Distribution	1.0124	1.0254	1.0451	1.0072	1.0226	1.0426
Electric Transmission	1.0137	1.0330	1.0542	1.0151	1.0352	1.0602
Customer Accounts	1.0217	1.0377	1.0555	1.0100	1.0258	1.0411
Customer Service & Information	1.0146	1.0167	1.0440	1.0082	1.0231	1.0384
Sales	1.0190	1.0311	1.0535	1.0129	1.0333	1.0526
Administrative & General (Excl. Health)	1.0226	1.0473	1.0787	1.0229	1.0507	1.0813

Table 4-3 below compares ORA's and SCE's forecasts of annual capital-related escalation rates while Table 4-4 reports ORA's and SCE's forecasts of capital-related escalation rates on a compound basis.

<sup>3</sup> Ex. SCE-10, Results of Operations, Vol. 1, Ch. VII, p. 72.

**Table 4-3**  
**Comparison of ORA's and SCE's 2013-2015**  
**Forecasts of Annual Capital Related Escalation**

Description	ORA Recommended			SCE Proposed <sup>4</sup>		
	2013	2014	2015	2013	2014	2015
Steam Generation	4.49 %	1.01 %	2.01 %	1.24 %	1.56 %	2.58 %
Nuclear Generation	5.34 %	1.50 %	2.13 %	1.65 %	2.16 %	2.73 %
Hydro Generation	3.29 %	2.13 %	2.15 %	2.07 %	2.45 %	2.78 %
Other Plant	3.31 %	1.60 %	2.21 %	3.25 %	2.21 %	2.39 %
Transmission	2.32 %	1.72 %	1.93 %	1.62 %	2.24 %	2.67 %
Distribution	2.39 %	1.53 %	2.25 %	2.18 %	2.49 %	2.12 %
Meters Installed	3.55 %	5.05 %	3.11 %	2.73 %	5.62 %	2.08 %
General Plant	1.75 %	2.62 %	2.19 %	1.87 %	2.23 %	2.28 %

**Table 4-4**  
**Comparison of ORA's and SCE's Forecasts of**  
**2013-2015 Compound Capital Escalation Factors**  
**(2012 = 1.0000)**

Description	ORA Recommended			SCE Proposed <sup>5</sup>		
	2013	2014	2015	2013	2014	2015
Steam Generation	1.0449	1.0554	1.0767	1.0124	1.0282	1.0547
Nuclear Generation	1.0534	1.0692	1.0920	1.0165	1.0385	1.0669
Hydro Generation	1.0329	1.0549	1.0776	1.0207	1.0457	1.0748
Other Plant	1.0331	1.0496	1.0728	1.0325	1.0553	1.0805
Transmission	1.0232	1.0408	1.0609	1.0162	1.0224	1.0267
Distribution	1.0239	1.0395	1.0629	1.0218	1.0472	1.0699
Meters Installed	1.0355	1.0879	1.1217	1.0273	1.0850	1.1076
General Plant	1.0551	1.0727	1.0959	1.0162	1.0383	1.0659

<sup>4</sup> Ex. SCE-10, Results of Operations, Vol. 1, Ch. VII, p. 79.

<sup>5</sup> Ex. SCE-10, Results of Operations, Vol. 1, Ch. VII, p. 79.

### 1     **III.     DISCUSSION / ANALYSIS OF LABOR ESCALATION**

#### 2             **A. SCE Methodology**

3             SCE's historical labor escalation rates are based on company-wide estimates  
4 of Average Hourly Earnings (AHE's). AHE's are defined as hourly wages, including  
5 overtime, divided by hours worked. Hours worked, in turn, are defined: "as the sum  
6 of: (i) straight time hours, (ii) overtime hours multiplied by one and one-half, [and] (iii)  
7 double time hours multiplied by two."<sup>6</sup> These historic AHE's are then converted to  
8 indexes with a base value of one in 2012.

9             For the 2013-2015 forecast period, SCE separates its employees into four  
10 categories, Physical Workers, Clerical Workers, Managers and Administrators, and  
11 Professional and Technical Workers. Wage increases for each group are coupled  
12 with indexes taken from the Global Insight Power Planner. Wage increases for the  
13 Physical and Clerical workforce are linked to the Global Insight Power Planner  
14 variable CEU4422110008, AHE Electric Power Generation, Transmission, and  
15 Distribution workers. For a portion of the forecast period wage increases for these  
16 workers are determined by collective bargaining agreements between SCE and its  
17 Unions. SCE explains that: "For 2013 and 2014, SCE's represented employees will  
18 receive a wage increase of 2.91 and 2.75 percent, respectively, based on the  
19 average of the two collective bargaining agreements for the International  
20 Brotherhood of Electrical Workers (IBEW) and the Utility Workers Union of America  
21 (UWUA)."<sup>7</sup> For these years, the union determined wage increases are used in place  
22 of the Global Insight Power Planner Index CEU442110008.

23             For Managers and Administrators, wage increases are coupled with the  
24 Global Insight Power Planner Index, ECIPWMBFNS, Employment Cost Index,  
25 Managers and Administrators. Wage increases for employees in the Physical and  
26 Technical category are coupled with the Global Insight Power Planner Index,

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<sup>6</sup> Ex. SCE-10, Results of Operations, Vol. 1, Ch. VII, p. 74.

<sup>7</sup> Ex. SCE-10, Results of Operations, Vol. 1, Ch. VII, p. 74.

ECIWSPWP&TNS, Employment Cost Index, Wages and Salaries, Technical and Professional workers.

To arrive at company-wide forecast wage increases, the wage increases for the four categories are weighted by the share of total wages represented by each employee category.

**Table 4-5 <sup>8</sup>**  
**SCE Employee Categories and Share of Wages**

<b>Employee Category</b>	<b>Global Insight Variable</b>	<b>Global Insight Description</b>	<b>Share of Total Wages</b>
Physical Workers	CEU4422110008	AHE Electric Generation, Transmission & Distribution Workers	24.066 %
Clerical Workers	CEU4422110008	AHE Electric Generation, Transmission & Distribution Workers	8.598 %
Managers & Administrators	ECIPWMBFNS	Employment Cost Index Managers & Administrators	25.753 %
Professional & Technical Workers	ECIWSPWP&TNS	Employment Cost Index Professional & Technical Workers	41.603 %
<b>Total</b>			<b>100.00 %</b>

For the 2013 – 2015 forecast period, SCE’s methodology results in modest wage increases of 2.79 % for 2013, 2.36 % for 2014 and 2.53 % for 2015.

### **B. ORA Methodology**

ORA has adopted SCE’s escalation methodology. In SCE’s last General Rate Case (GRC) filing, ORA recommended substituting SCE’s union negotiated wage increases with the Global Insight Index CEU4422110008. The Commission, however, rejected this approach.<sup>9</sup> In this proceeding ORA has incorporated SCE’s union negotiated wage increases of 2.91 % and 2.75 % for 2013 and 2014 along with 2015 2.75 % wage increase negotiated between SCE and the UWUA for 2015. ORA notes that the fourth quarter 2013 Global Insight Power Planner forecasts nationwide wage increases for Electric Power Generation, Transmission, Distribution

<sup>8</sup> Ex. SCE-10, Results of Operations, Vol. 1, Ch. VII, p. 76.

<sup>9</sup> D.12-11-051, *mimeo*, p. 598.

workers of 2.50 % in 2014 and 2.30 % in 2015. In short, SCE's union negotiated wage increases for the 2013 – 2015 forecast horizon are very similar to the most recent Global Insight projections for this employee category. ORA's forecasts of ECIPWMNFNS and ECIWSPWP&TNS are based on the fourth quarter Global Insight Power Planner forecast.

ORA forecasts annual labor escalation rates of 2.79 % for 2013, 2.31 % in 2014 and 2.59 % for TY 2015.

#### **IV. DISCUSSION / ANALYSIS OF NON-LABOR ESCALATION**

##### **A. SCE Methodology**

SCE's historical and forecast non-labor escalation rates are based on indexes taken from the IHS Global Insight Power Planner. The indexes in the Global Insight Power Planner parallel the Federal Energy Regulatory Commission (FERC) Uniform System of Accounts. Table 4-6 shows the functional expense categories and the Global Insight Power Planner index associated with each functional category.

**Table 4-6<sup>10</sup>**  
**Southern California Edison O&M Expense Categories and**  
**Global Insight Power Planner Indexes**

<b>O&amp;M Expense Category</b>	<b>Global Insight Power Planner Index</b>
Steam Generation	JEFOMMS
Nuclear Generation	JENOMMS
Hydro Generation	JEHOMMS
Other Production	JEOOMS
Transmission	JETOMMS
Distribution	JEDOMMS
Customer Accounts	JECAOMS
Customer Service & Information	JECSIOMS
Sales	JESALOMS
Administration and General	JEADGOMMS
Administrative and General Excluding Health Care	JEADGOMMS_H

<sup>10</sup> Ex. SCE-10, Results of Operations, Vol. 1, Ch. VII, Cost Escalation Workpapers, p. 3.

With the exception of JEADGOMMS\_H, A&G escalation, excluding health care, forecasts of the indexes reported in Table 4-6 were taken directly from the Fourth quarter 2012 IHS Global Insight Power Planner.

The index JEADGOMMS\_H is a specially constructed variable designed to remove the impact of health care cost escalation from A&G expenses. SCE explains that: "Because SCE treats health care cost trends separately, the effect of health care changes is removed from the non-labor escalation rates shown in this chapter. This was done by requesting adjusted A&G non-labor or escalation rates from Global Insight...that specifically exclude the effect of health care cost escalation."<sup>11</sup> In the FERC Uniform System of Accounts health care costs are included in Account 926. The Global Insight variable for Account 926 is JEADG926MS. First, Global Insight revised the index JEADG926MS to remove the impact of health care costs. The final step was to reweight the Global Insight indexes which proxy A&G operations costs. The two sets of weights, one including health care costs, and the other, excluding health care costs are reported in Table 4-7.

**Table 4-7<sup>12</sup>**  
**A&G Operational Cost Weights**

Index	Weight	
	Including Health Care Costs	Excluding Health Care Costs
JEADG921MS	0.194	0.149
JEADG923MS	0.140	0.108
JEADG924MS	0.067	0.052
JEADG925MS	0.117	0.090
JEADG926MS	0.199	0.383
JEADG927MS	0.040	0.031
JEADG928MS	0.047	0.036
JEADG9301MS	0.007	0.005
JEADG9302	0.137	0.040
<b>Total</b>	<b>1.000</b>	<b>1.000</b>

<sup>11</sup> Ex. SCE-10, Results of Operations, Vol. 1, Ch. VII, p. 77.

<sup>12</sup> Derived from Ex. SCE-10, Results of Operations, Vol. 1, Ch. VII, Cost Escalation Workpapers.

1           **B. ORA Methodology**

2           ORA relied upon the same non-labor escalation methodology as did SCE.  
3           ORA, however, relied upon a more recent IHS Global Insight Power Planner forecast  
4           than did SCE. Specifically, ORA relied upon the fourth quarter 2013 IHS Global  
5           Insight Power Planner while SCE's forecast was taken from the earlier fourth quarter  
6           2012 IHS Global Insight Power Planner.

7           **V.     DISCUSSION / ANALYSIS OF CAPITAL ESCALATION**

8           **A. SCE Methodology**

9           SCE presents capital related escalation rates for the following plant  
10          categories: Steam Generation, Nuclear Generation, Hydro Generation, Transmission  
11          Plant, Distribution Plant, Installed Meters, and General Plant. With the exception of  
12          General Plant, historical escalation rates are based on the Handy-Whitman  
13          Construction Cost Indexes for the Pacific Region and forecasted plant escalation  
14          rates are taken from the fourth quarter IHS Global Insight Power Planner. Table 4-8  
15          reports the plant types, the Handy-Whitman Indexes, and the IHS Global Insight  
16          Power Planner index variables.  
17

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**Table 4-8<sup>13</sup>**  
**Plant Escalation Categories and Variable Names**

<b>SCE Variable</b>	<b>Global Insight Variable</b>	<b>Global Insight Variable Name</b>	<b>Region</b>
Steam Generation	Total Steam Production Plant	JUEPPF_PCF	Pacific
Nuclear Generation (SONGS)	Total Nuclear Production Plant	JUEPPN_PCF	Pacific
Hydro Generation	Total Hydraulic Production Plant	JEUEPPH_PCF	Pacific
Other Generation	Total Other Production Plant	JUEPPO_PCF	Pacific
Transmission	Total Transmission Plant	JUEPT_PCF	Pacific
Distribution	Total Distribution Plant	JUEPD_PCF	Pacific
Installed Meters (CSBU Distribution)	Total Distribution Plant	JUEPD_PCF	Pacific
Nuclear Palo Verde	Total Nuclear Production Plant	JUEPPN_PLA	Plateau
General Plant	SCE Variable	na	na

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The General Plant capital cost index is an SCE constructed variable. The component indexes and their relative weights are reported in Table 4 - 9.

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<sup>13</sup> Ex. SCE-10, Results of Operations, Vol. 1, Ch. VII, Cost Escalation Workpapers, p. 14.



**Table 4 – 9<sup>14</sup>**  
**SCE General Plant Escalation Index**

Global Insight Variable	Description	Weight
JPGDP	Chained Price Index Gross Domestic Product	3.34 %
JPIFNREEMISCB	Chained Price Index Miscellaneous Equipment	25.69 %
JPIFNRESXF	Chained Price Index Nonresidential Construction of Nonfarm Buildings	30.06 %
WPI11	Producer Price Index Machinery & Equipment	1.32 %
WPI12	Producer Price Index Furniture & Household Durables	38.12 %
WPI14	Producer Price Index Transportation Equipment	1.47 %
<b>Total</b>		<b>100.00 %</b>

## **B. ORA Methodology**

For capital escalation ORA has adopted SCE's methodology. As in the case of labor and non-labor escalation, ORA's results reflect the use of a more recent IHS Global Insight Power Planner forecast. Specifically, for Steam Generation, Hydro Generation, Nuclear Generation, Palo Verde, Other Generation, Transmission, and Distribution ORA relied upon the fourth quarter 2013 IHS Global Insight Power Planner. For the General Plant index ORA relied upon the April 2014, IHS Review of the U.S. Economy.

## **C. Palo Verde Escalation**

SCE has a partial financial stake in the Palo Verde Nuclear Generating Station and recently sold its share of the Four Corners Generating Station. Both plants are operated by Arizona Public Service (APS). To escalate the labor and non-labor costs associated with these plants SCE develops blended labor and non-labor escalation rates for these plants. The labor and non-labor weights are based on the relative shares of labor and non-labor expenses associated with SCE's share of

<sup>14</sup> Ex. SCE-10, Results of Operations, Vol. 1, Ch. VII, Cost Escalation Workpapers, p. 17.

operating costs for these plants. As SCE explains: “The current labor-weighting for Palo Verde is 57.06%; the non-labor weighting is 42.94%”<sup>15</sup>

Table 4-10 compares ORA’s and SCE’s weighted escalation rates for Palo Verde.

**Table 4 – 10**  
**Palo Verde Weighted Escalation Rates**

<b>Year</b>	<b>Index</b>	<b>Per Cent Change</b>	<b>Index</b>	<b>Per Cent <sup>16</sup>Change</b>
	<b>DRA</b>	<b>DRA</b>	<b>SCE</b>	<b>SCE</b>
2008	0.902	3.83 %	0.902	3.83 %
2009	0.909	0.80 %	0.909	0.80 %
2010	0.938	3.19 %	0.938	3.19 %
2011	0.977	4.16 %	0.977	4.16 %
2012	1.000	2.32 %	1.000	2.32 %
2013	1.020	1.96 %	1.018	1.79 %
2014	1.031	1.12 %	1.040	2.16 %
2015	1.056	2.43 %	1.065	2.40 %
2016	1.086	2.82 %	1.093	2.62 %
2017	1.115	2.68 %	1.120	2.52 %

For the forecast period 2013-2015, ORA forecasts a Palo Verde blended escalation rate of 1.96 % in 2013, 1.12 % in 2014 and 2.43 % in TY 2015. On a compound basis, ORA recommends a blended Palo Verde escalation rate of 5.6 %. SCE forecasts blended escalation rates of 1.79 %, 2.16 % and 2.40 %, respectively, for 2013, 2014 and 2015. For TY 2015, SCE recommends a compound escalation rate of 6.50 %.

<sup>15</sup> Ex. SCE-10, Results of Operations, Vol. 1, Ch. VII, pp. 76-77.

<sup>16</sup> Ex. SCE-10, Results of Operations, Vol. 1, Ch. VII, p. 73.